positions of the display to represent sound sources (Fig. 5). Further the Examiner stated that, as per claim 7, Ishikawa et al also disclose the markers having a pointer for each sound channel, the location of the pointer along the correlation meter scale indicating the correlation between the corresponding sound channels (Fig. 4 where the edges of the markers are considered the pointer). With respect to claim 8 the Examiner stated that Ishikawa et al disclose the markers having a fill area spanning the correlation meter scales for the stereo corresponding sound channels (Fig. 4 where the markers fill an area and form a width to indicate the correlation between the corresponding sound channels). Finally the Examiner stated that, as per claim 9, Ishikawa et al disclose the thickness of the fill area indicating the amplitude of each sound channel (Fig. 4 "the volume levels of the respective speakers are expressed by the numbers of thick vertical bars" – col. 5, lls. 12-14). Applicants respectfully traverse this improper and nonobvious conclusion by the Examiner.

In contradistinction to Applicants' claimed invention Ishikawa et al show in Fig. 4 an exemplary display mode of a CRT where characters are displayed on the CRT screen. Applicants submit that Fig. 4 does not show a "sound stage image" as recited by Applicants. Rather Fig. 4 shows conventional bar graphs – one for balance between left and right and one each for center, front and rear speakers. The balance bar represents which speaker is providing sound – in Fig. 4 it is the left speaker only since the volume tics only exist on the left side of the center marker of the balance bar and the left indicator is highlighted and the front speaker symbol also is highlighted. The tic marks, or thick vertical bars, after each speaker symbol indicate the volume levels of the respective speakers in conventional bar graph form. However Fig. 4 does not graphically show relative positions of the speakers to a

listener, which is what a "sound stage image" is (see Applicants' Figs. 1-9). Fig. 5 is a "sound stage image" since it is a graphic representation of the speaker positions or sound sources relative to a listener (the center of the image). Fig. 5 is another example of an on-screen volume display where the volume levels are displayed on five positions of the screen corresponding to the actual speaker positions, with the speaker outputting a test tone being highlighted. Ishikawa et al disclose a test tone system for a surround sound system which sequentially applies a test tone to each speaker in turn, with the display indicating which speaker currently carries the test tone as well as volume levels for the respective speakers. Ishikawa et al does not indicate correlation, i.e., phase correlation – "a correlation meter scale" – between speakers that make up a stereo pair, but only volume for each speaker. Since only one speaker at a time is supplied with the test tone, there is no need for looking at correlation between stereo sound source pairs.

The bar graph used by Ishikawa et al in Fig. 4 indicates a maximum volume by the speakers and does not form a correlation meter scale for each. As indicated with respect to the Bradford reference previously, Ishikawa et al also do not have any scale indicators. Further the "markers" of Ishikawa et al are merely volume indicators as in a conventional bar graph and do not show correlation between sound channel stereo pairs. Therefore Ishikawa et al neither teach nor suggest the invention as claimed by Applicants in claim 1.

Claim 7 recites that the marker is a pointer, not thick vertical bars, with the location of the pointer along the scale indicating the correlation between corresponding sound channels of the stereo pair. Claim 8 recites that the markers form a fill area that spans the scales, i.e., a contiguous area that overlaps both

scales of the stereo pair, with the width indicating the correlation. Finally claim 9 recites that the thickness, i.e, the other dimension from width, indicates the amplitude of each sound channel. Ishikawa et al do not teach pointers or fill areas as correlation indicators, since Ishikawa et al do not address correlation between stereo pairs. And Ishikawa et al certainly do not teach a two-dimensional indicator with one dimension being amplitude and the other correlation. Thus claims 7-9 also are deemed to be allowable as being neither anticipated nor rendered obvious to one of ordinary skill in the art by Ishikawa et al.

In view of the foregoing remarks allowance of claims 1-15 is urged, and such action and the issuance of this case are requested.

Respectfully submitted,

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